

Quantitative Research Methods SOCI 104

Fall 2025 Section 80 Fully Online 3 Unit(s) 08/20/2025 to 12/08/2025 Modified 08/06/2025

Contact Information

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Office Hours: Wednesdays 1:30-2:15 p.m. on Zoom @ <https://sjsu.zoom.us/j/92544100827>

Course Description and Requisites

Quantitative research methods including survey research design, hypothesis formulation, questionnaire and interview design, scaling, sampling and data preparation and SPSS analysis. Completion of a class research project plus individual research reports. Required for majors.

Prerequisite: SOCI 1 or equivalent, SOCI 15 or SOCI 102 or approved Statistics course from another school; SOCI 100W, SOCI 101 and upper division standing.

Letter Graded

Classroom Protocols

Classroom AI Policy: It is expected that AI will not be a substitute for doing the expected work in this class including the assigned readings, videos and other course material. It is also expected that you first try assignments on your own, without AI. Finally, it is expected that if you use AI for assignments, that you let me, the instructor, know that it was used, how it was used and the extent to which it was used. You can do that in the assignment submission, discussion post, etc. or in the comment box on Canvas for the assignment submission.

Program Information

Program Learning Outcomes

1. Students will be able to think sociologically about the relationship between social structure, interaction, identities, and inequalities.
2. Students will be able to identify and explain major sociological theories and apply them to everyday life.

3. Students will be proficient in qualitative and quantitative research design, data collection and data analysis.
4. Students will be proficient in oral and written communication skills appropriate to the discipline.
5. Students will be able to practice sociology as educated and civically engaged persons.

Course Learning Outcomes (CLOs)

CLO1: Students will gain knowledge of and able to use basics of quantitative research design, including but not limited to the research process, inductive and deductive logic, theory, conceptualization and operationalization, survey design, data analysis, presentation and data reporting. This CLO will be assessed throughout the course by assignments and the final project.

CLO2: Students will develop basic proficiency using the statistical software SPSS. Students will code data, analyze data and interpret SPSS output. This CLO will be assessed throughout the course by three SPSS specific assignments and the final project.

CLO3: Students gain knowledge of and grapple with interpretation of research ethics, including the three ethical principles that structure social science research and the 6 ethical principles of the American Sociological Associations Code of Ethics. This component will be assessed in mini-assignments and group discussion board posts.

CLO4: Students will understand and use descriptive and inferential statistics. This component of this class should be a review and extension of an Introduction to Statistics class such as SOCI. 15. This component will be assessed in mini-assignments and the final project.

CLO5: Students will conduct a quantitative research project, presentation of project and report from the project. This final quantitative report will include: asking a research question; conducting an appropriate literature review on the research question; describing and implementing a research design; analyzing data; and drawing conclusions based on the findings that answer the research question. Proficiency will be assessed in mini-module assignments, the final project presentation and in the final research report.

Course Materials

All course readings are available through the class resources on Canvas and/or online. You may have to purchase a couple of films online for this course.

Grading Information

Your grade is earned from a total of 350 points; the below distribution is an approximation and is subject to change.

In-class and Module Assignments	170 pts.
Discussion Board Assignment Posts	72 pts.
Quizzes	63 pts.
Final Project Presentation	15 pts.
Final Project Report and/or Learning Page	30 pts.
TOTAL	350 pts.

Criteria

Grades will be calculated as follows:

331-350+ = A
315 - 330 = A-
303 - 314 = B +
293 - 302 = B
280 - 292 = B -
268 - 279 = C +

258 - 267 = C

245 - 257 = C -

233 - 244 = D +

223 - 232 = D

209 - 222 = D -

000 - 208 = F

University Policies

Per [University Policy S16-9 \(PDF\)](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the [Syllabus Information](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) (<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>) web page. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Below is the course outline. This schedule is subject to change with fair notice, which will be provided via Canvas.

	Topics	Reminders
MODULE 1	Introductions and Course Basics	
MODULE 2	Introduction to Social and Quantitative Research, Exploring Research Interests and Levels of Measurement	

	Topics	Reminders
MODULE 3	Introduction to Social and Quantitative Research Continued: Units of Analysis, Variables, Independent variables, Dependent Variables, and Developing a Research Question	Check: Last Day to Add Courses and Register Late
MODULE 4	Theory and Inductive and Deductive Reasoning	
MODULE 5	Conceptualization and Operationalization	
MODULE 6	Sampling and Intro to SPSS	
MODULE 7	Survey Research, Validity and Reliability and the Code Book	
MODULE 8	Research Ethics	
MODULE 9	SPSS: Descriptive Statistics and Recoding Variables	

	Topics	Reminders
Module 10	SPSS: Graphs and Splitting Files/Comparing Subsets of Cases	
MODULE 11	SPSS: Crosstabs and the Chi- square Test	
MODULE 12	The Literature Review	
MODULE 13	The Literature Review cont.	
MODULE 14	Summarizing and Reporting Research	
MODULE 15	THANKSGIVING WORK ON PROJECTS	
MODULE 16	Final Projects Due	